

### **Amendments to the Claims:**

Please amend claims 1 and 5 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (currently amended) A method of monitoring the operation of at least one microcontroller unit that is intended for at least one application and is associated with a system, by means of at least one base chip, particularly a system base chip, characterized in that:

a reset of the microcontroller unit is caused if a reset condition is detected, wherein the reset condition is transmission of at least one special sequence, particularly at least one drive or access sequence assigned to the reset operation, ~~is applied to the base chip and~~ the reset of the microcontroller unit is confirmed under an enquiry routine a ~~check is made to see by checking~~ whether the at least one special sequence has been successfully ~~applied~~ transmitted to the base chip; and

a special mode of operation, particularly a flash mode of the base chip, can be activated once after the check has been made to see whether the special sequence has been successfully applied and after the reset operation, by allowing access to at least one monitoring module that is associated with the base chip to take place in a manner which is simplified in comparison with the normal mode of operation of the microcontroller unit.

2. (canceled)

3. (previously presented) A method as claimed in claim 1, characterized in that:

during the special mode of operation, use is made of a special trigger code or a special trigger signal for the monitoring module that is different from the normal mode of operation; and

a fresh reset of the microcontroller unit is caused by the normal trigger code or the normal trigger signal, to enable the special mode to be exited again.

4. (previously presented) A method as claimed in claim 1, characterized in that:

a distinction can be made between reset events that differ in relation to the operation of the microcontroller unit; and

these different reset events are suitably logged and made known in at least one register unit by means of different register entries.

5. (currently amended) A base chip, particularly a system base chip, for monitoring the operation of at least one microcontroller unit that is intended for at least one application, characterized by:

at least one reset unit for resetting the microcontroller unit, which reset unit is connected to said microcontroller unit, wherein a reset of the microcontroller unit is caused if a reset condition is detected, wherein the reset condition is transmission of at least one special sequence, particularly at least one drive or access sequence assigned to the reset operation, is applied to the base chip and the reset of the microcontroller unit is confirmed under an enquiry routine ~~a check is made to see by checking~~ whether the at least one special sequence has been successfully-applied transmitted to the base chip; and

at least one monitoring module that is associated with the microcontroller unit, wherein a special mode of operation, particularly a flash mode of the base chip, can be activated once after the check has been made to see whether the special sequence has been successfully applied and after the reset operation, by allowing access to the at least one monitoring module to take place in a manner which is simplified in comparison with the normal mode of operation of the microcontroller unit.

6. (previously presented) A base chip as claimed in claim 5, characterized by:

at least one register unit that is provided to allow for different reset events, for logging and making known different reset events by means of different register entries.

7. (previously presented) A base chip as claimed in claim 6, characterized in that:  
the monitoring module is triggerable in particular by means of at least one interface unit; or  
to distinguish between the particular accesses to the monitoring module, different reset events can be marked by different trigger codes or trigger signals.
8. (previously presented) A base chip as claimed in claim 7, characterized in that there is provided between the monitoring module and the microcontroller unit at least one signal line for transmitting at least one trigger code or trigger signal that differs from the normal mode of operation of the microcontroller unit.
9. (previously presented) A system, and particularly a control system, characterized by at least one microcontroller unit intended for at least one application and by at least one base chip as claimed in claim 5.
10. (previously presented) Use of a method as claimed in claim 1 for monitoring the operation of at least one microcontroller unit intended for at least one application, in the electronics of motor vehicles.
11. (previously presented) The use of a method as claimed in claim 10, wherein the at least one application includes automobile electronics.
12. (previously presented) Use of at least one base chip as claimed in claim 5 for monitoring the operation of at least one microcontroller unit intended for at least one application, in the electronics of motor vehicles.
13. (previously presented) The use of at least one base chip as claimed in claim 12, wherein the at least one application includes automobile electronics.